Marbled Murrelet Effectiveness Monitoring Nesting Habitat Team Meeting, November 30, 2000

In Attendance:

Jim BaldwinSherri MillerNaomi BentivoglioKim NelsonDiane EvansKen OstromJon MartinRandall Wilk

Tim Max

Overview

There is concern with the accuracy of the satellite vegetation maps that have been produced so far. The group will begin to focus more on the nonmap model. Perhaps we'll be able to tie it to a spatial configuration through a combination of aerial photography and satellite vegetation maps in future. We will continue to pursue the satellite vegetation efforts as well.

The first step toward focusing on the nonmap model will be a status review of available data. We'll need sites for which occupancy/absence has been ascertained and at which we have vegetation data. We think we have hundreds of sites per each state for which we know the status of the bird (~1000 total). We're guessing that there will be less than 200 sites for which we also have the vegetation information. We need to know:

- 1. Number of sites that have vegetation plots.
- 2. Vegetation plot variables included in above.
- 3. Number of vegetation plots per site.
- 4. Type of sampling in vegetation plots and how it was done. What was the plot size? How were plots were selected (ie, were they centered over a nest tree)?
- 5. Objective for sampling (ie, research plot, etc.).
- 6. Land ownership.

Going full circle back to our occupancy/absence sites, we'll also need to know:

- 1. Site acres (size).
- 2. Distribution by province.
- 3. Site boundaries? Y/N? How derived/delineated? Synopsis of the basis for boundary delineation.
- 4. Summarized number of unoccupied sites per province. Determine which/how many still standing (haven't been harvested).

The second step will be to collect additional information. We'll divide the area into blocks and randomly select from within blocks to get a good geographic spread. This will help determine number and distribution of additional plots needed. At the site level, we'll need to identify the site boundary. We can lay a grid over the site and randomly select plots. Kim will send a list of variables from her and Tom's study. Absence sites will still have to be surveyed 2 years according to protocol.

Principal Components Analysis. Jim doesn't think it's a helpful tool for reducing the number of variables. It could throw out a variable that is the best predictor just because it has high variability. Other methods are better. SAS Version 8 has a more simplified output program. Jim can add other statistics to look at (Holistic Indicator Criteria).

Forest Inventory Analysis and Current Vegetation Surveys are moving toward more unified data collection at the plots. However, there are concerns that information about rare events (large trees) may be lost. The Regional Monitoring Team needs to provide feedback to Jim Alegria on this issue.

Annual Data Summary due March 1, 2001 to Monitoring Program Managers. Naomi will provide a progress report of this team's activities in the report. Will share draft with team members.